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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/970,068	10/02/2001	Chia-Tin Chung	13732.1US01	9067

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EXAMINER

GARRETT, DAWN L

ART UNIT	PAPER NUMBER
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1774

7

DATE MAILED: 08/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/970,068

Applicant(s)

CHUNG ET AL.

Examiner

Dawn Garrett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6-10 and 12-16 is/are allowed.
- 6) ☒ Claim(s) 1,3 and 11 is/are rejected.
- 7) ☒ Claim(s) 4 and 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Response to Amendment

1. This Office action is in response to applicant's amendment mailed May 28, 2003, paper no. 6. Claim 2 was canceled. Claims 3-6 were amended. Claims 12-16 were added. Claims 1 and 3-16 are currently pending.
2. It is respectfully suggested subscripts be used for the numbers in the chemical formulas of claims 5 and 10.
3. The rejection of claims 6-10 under 35 USC 112, second paragraph, set forth in paper no. 5 (mailed February 28, 2003), paragraphs 3-5, is withdrawn due to the amendment of claim 6 to remove the unclear phrase "in position to".
4. The rejection of claims 2, 4, and 5 under 35 USC 103(a) as being unpatentable over Rogers (US 6,081,071) set forth in paper no. 5, paragraph 7, is withdrawn due to the cancellation of claim 2 and the amendment of claims 4 and 5.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rogers (U.S. 6,081,071) in view of Young et al. (US 6,489,719). Rogers teaches an electroluminescent device which is encapsulated (see title). The Rogers laminate EL device (13) is shown in Figure 2 (see also col. 2, lines 60-66). Rogers teaches an

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organic EL apparatus is comprised of a light-emitting layer formed between a pair of electrodes per instant claim 11 (see col. 1, lines 22-24). The device is adjacent a glass substrate and a glass cover is positioned over the substrate per the instant "sealing case" of instant claim 1 (see abstract). Two sealing layers (**22** and **23**) attach the glass substrate to the glass cover (see abstract and Figure 2). Desiccant, deposited on the glass cover, is used between the perimeter sealing layers for absorption of moisture and gases in the Rogers structure in contrast to the instant limitation requiring the drying layer on the glass substrate (see Figure 2 and col. 4, lines 7-33). Although Rogers teaches the use of desiccant to protect the device, Rogers fails to teach that either of the two sealing layers formed on the inner surface of the glass substrate (per instant claim 1) specifically comprise a desiccant dispersed in the adhesive agent of the sealing layers. Young et al. teaches, in analogous art, an adhesive seal between an EL substrate and a sealing cover, which comprises inorganic particles such as Al_2O_3 and SiO_2 deposited in an adhesive (see Young et al. col. 3, lines 1-15). The incorporation of the inorganic particles in the adhesive material allows moisture to diffuse more slowly through the seal than through a seal comprising only adhesive material (see Young et al. col. 3, lines 8-10). It would have been obvious for one of ordinary skill in the art at the time of the invention to have used a seal as taught by Young et al. comprising adhesive material with dispersed inorganic particles such as Al_2O_3 and SiO_2 as the adhesive agent for the two perimeter seals in the Rogers device, because Young et al. teaches the incorporation of inorganic particles in an adhesive for an EL device sealing layer provides decreased moisture permeation through the seal which provides

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increased protection to the EL device against environmental damage. The two perimeter seals (**22** and **23**) of Rogers read upon the instant outer "sealing layer" and the instant inner "drying layer".

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rogers (U.S. 6,081,071) in view of Young et al. (US 6,489,719) in further view of Bernius et al. (US 6,383,664). Rogers and Young et al. are relied upon as set forth above. Young et al. teaches the organic sealing material comprises epoxy-based adhesives and hydrocarbons (see Young et al. col. 3., lines 1-3), but fails to mention specifically that UV-curing resin is also a suitable adhesive as required by instant claim 3. Bernius et al. teaches, in analogous art, UV-curable adhesives and epoxy adhesives are equivalent sealing materials for use in sealing an EL device protective cover. It would have been obvious to one of ordinary skill in the art at the time of the invention to have used UV-curable adhesive in place of epoxy resin in the Young et al. organic sealing material, because Bernius et al. teaches UV-curable adhesive and epoxy resin are equally useful in forming a seal for an EL device protective cover.

Allowable Subject Matter

8. Claims 6-10 are allowed for the reasons given in paper no. 5, paragraph 9.

9. Claims 12-16 are allowed for the reasons given in paper no. 5, paragraph 9 and also for the following reasons: The closest prior art, Roger and Young, fail to teach a composite material with the function of removing moisture, oxygen, and impurities in combination with the other component limitations of an EL device as required by independent claim 12.

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10. Claim 4 and 5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The closest prior art, Rogers and Young discussed herein, fails to disclose or to render obvious an inorganic and an organic absorbing material used in combination in an EL device as required by claim 4.

Response to Arguments

11. Applicant's arguments filed May 28, 2003 have been fully considered but they are not persuasive. With regard to the rejection over Rogers, applicant argues "Roger does not teach or suggest that the two seals 22 and 23 and the two desiccants 30 and 31 can be replaced by a combination of one loop of seal and one loop of desiccant." In response, the examiner submits the present claims use open, "comprising" claim language and do not exclude multiple seal and desiccant loops from being present in the device. Applicant further discusses the pressing precision and lower processing costs of the present device. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the pressing precision) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). With regard to the rejection over Young et al., applicant argues features that are not taught such as two loops of each of a seal and a desiccant. The examiner submits these are features disclosed by the primary reference, Roger. With regard to applicant's suggestion Young does not indicate the sealing material 9 will

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work if used as a loop material, the examiner respectfully notes the sealing material 8 and 9 extends around the perimeter of the device (see col. 4, lines 35-43). Applicant states the inorganic particles discussed by Young are not drying materials. The examiner respectfully submits the inorganic materials taught by Young are drying materials and act as moisture retardants. Silica, which is one inorganic particle taught by Young, is notoriously well known as a drying agent (see for example Yamashita et al. (US 5,189,405) col. 3, lines 3-5; cited previously by examiner). The rejections of claims 1, 3, and 11 are respectfully maintained.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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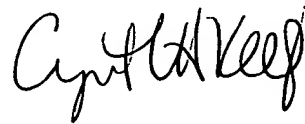
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dawn Garrett whose telephone number is (703) 305-0788. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached at (703) 308-0449. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2351.

D.G.
August 18, 2003

CYNTHIA H. KELLY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

A handwritten signature in black ink, appearing to read "Cynthia H. Kelly", is written over the typed name and title.